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CURRENT SERIAL RECORDS

the MELON FLY



The Melon Fly

The melon fly¹ is not known to occur in the continental United States. It may get in. If it does, and if it becomes established, it will cause serious crop damage and financial loss. Watch for this insect and for any other insects you do not recognize. Report them promptly so they may be identified, controlled, and possibly eradicated.

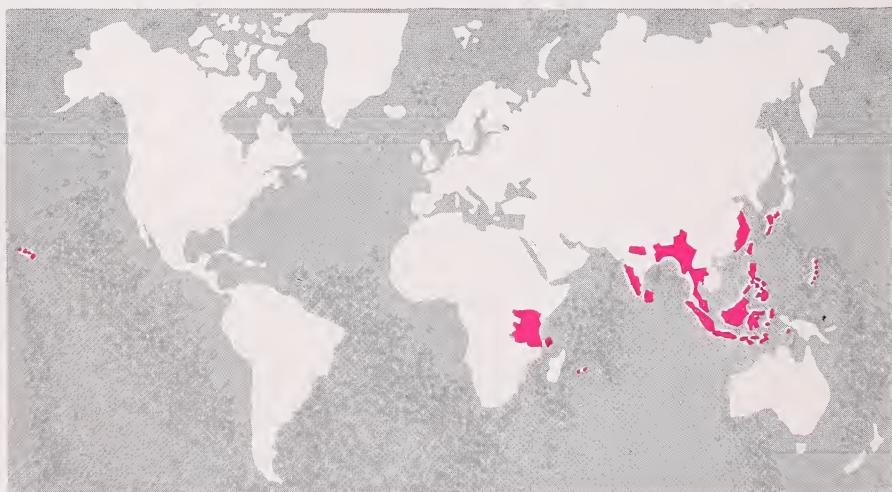
In the Indo-Malayan region, the melon fly is considered the most destructive pest of melons and related crops. Hawaii is the only one of our States in which this insect is known to occur. There it has greatly curtailed the production of melons, cucumbers, and tomatoes; in one year it was reported to have destroyed 75 percent of these crops.

Worldwide, the melon fly has more

than 80 host plants. Among those it prefers are cantaloup, watermelon, pumpkin, squash, cucumber, tomato, and cowpea. Hosts it occasionally infests include eggplant, orange, fig, papaya, peach, and mango.

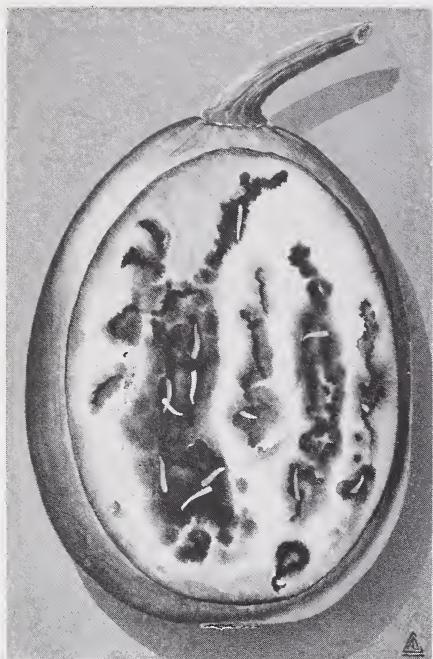
The impact the melon fly might have on the economy of our agriculture, should the pest become established here, is indicated by the value of some of its preferred host crops. The values below are for crops produced in the United States in 1960.

¹ *Dacus cucurbitae*.



BN-17276

Geographic distribution. Red areas indicate parts of the world where the melon fly occurs.



BN-17272

Damage to young watermelon caused by the melon fly.

<i>Crop</i>	<i>Value</i>
Cantaloups	\$54 million
Watermelons	\$40 million
Cucumbers	\$38 million
Tomatoes	\$250 million

The melon fly has been intercepted numerous times at west-coast ports from Seattle, Wash., to San Diego, Calif. It has been intercepted several times at Houston, Tex., a few times at Mobile, Ala., and twice at Boston, Mass. A single female fly was trapped at Los Angeles, Calif., July 24, 1956; an eradication program was undertaken immediately, and no further specimens were found.

DESCRIPTION OF INSECT

The adult melon fly is $\frac{1}{4}$ to $\frac{3}{8}$ inch long. The body is reddish yellow.

The head is yellowish and has black spots. Thorax and abdomen have yellow markings. Wings are shiny and transparent, and are marked with brown spots. The larva is creamy white, and is like a typical maggot in appearance.

DESCRIPTION OF DAMAGE

Adult melon flies feed on the juices of host plants, and the females deposit their eggs in the tender tissues. The larvae that hatch from the eggs are responsible for the damage to



Adult melon flies. Top, male; bottom, female. Enlarged.

plants. The larvae feed and burrow in the plant tissues, and often cause their rapid decomposition. They puncture the fruit, causing dead spots

to appear around the punctures. If the fruit continues to grow, it becomes distorted. Sometimes they damage seedlings and roots.

The Plant Pest Problem

At least half of our most destructive insects entered the United States from other countries, many before the Plant Quarantine Act of 1912 was passed. Today, thousands of plant pests are intercepted at our borders by plant quarantine inspectors, but some of them still gain entry.

When a new pest is detected, orga-

nized efforts are exerted to (1) pinpoint the areas where it has become established, (2) set up quarantines to prevent spread, and (3) control the pest and eradicate it if possible. The sooner a new pest is detected, the better is the chance of controlling or eradicating it before it does serious damage.

What You Can Do

Watch for the melon fly. Unless this insect were caught in special traps, it most likely would be found in the larval stage infesting the fruit of one of its many hosts. The flies probably would be seen in early morning or late afternoon, depositing eggs. In certain areas of this country, the insect could be active throughout the year.

If you find creamy-white larvae, of typical maggot appearance, in fruit, melons, or vegetables, and you are not certain what they are, send

specimens to your nearest agricultural official. Send adult flies also, if they fit the description of the melon fly or if you do not recognize them. Mail specimens in a small bottle containing rubbing alcohol. Include a note giving your name and address, and telling where the specimens were found and on what plant. Do not send live specimens. If your local agricultural official does not recognize the specimens, he will send them to the proper authorities for identification.

Prepared by

Plant Pest Control Division
Agricultural Research Service

Washington, D.C.

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